

# Space & Naval Warfare Systems Command

## FORCEnet Implementation

October 22, 2004

**SPAWAR**



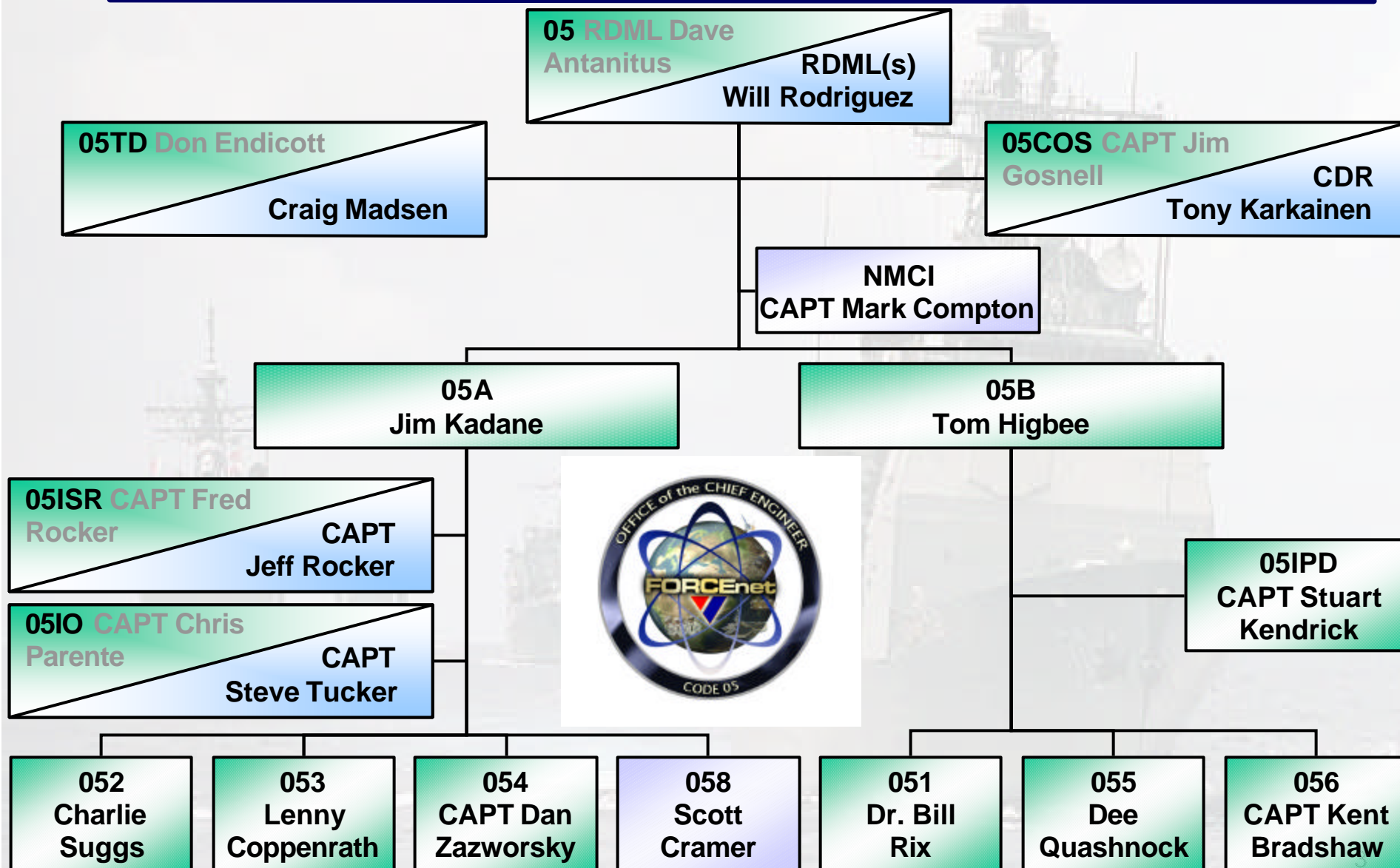
**Jim Kadane**  
Deputy Chief Engineer  
SPAWAR 05 Office of the Chief Engineer

- **What's New in the Office of the Chief Engineer?**
- **FORCEnet CHENG Activities**
- **Corporate Leadership Team (CLT) Process**



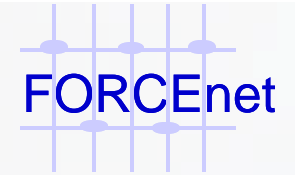


# SPAWAR 05



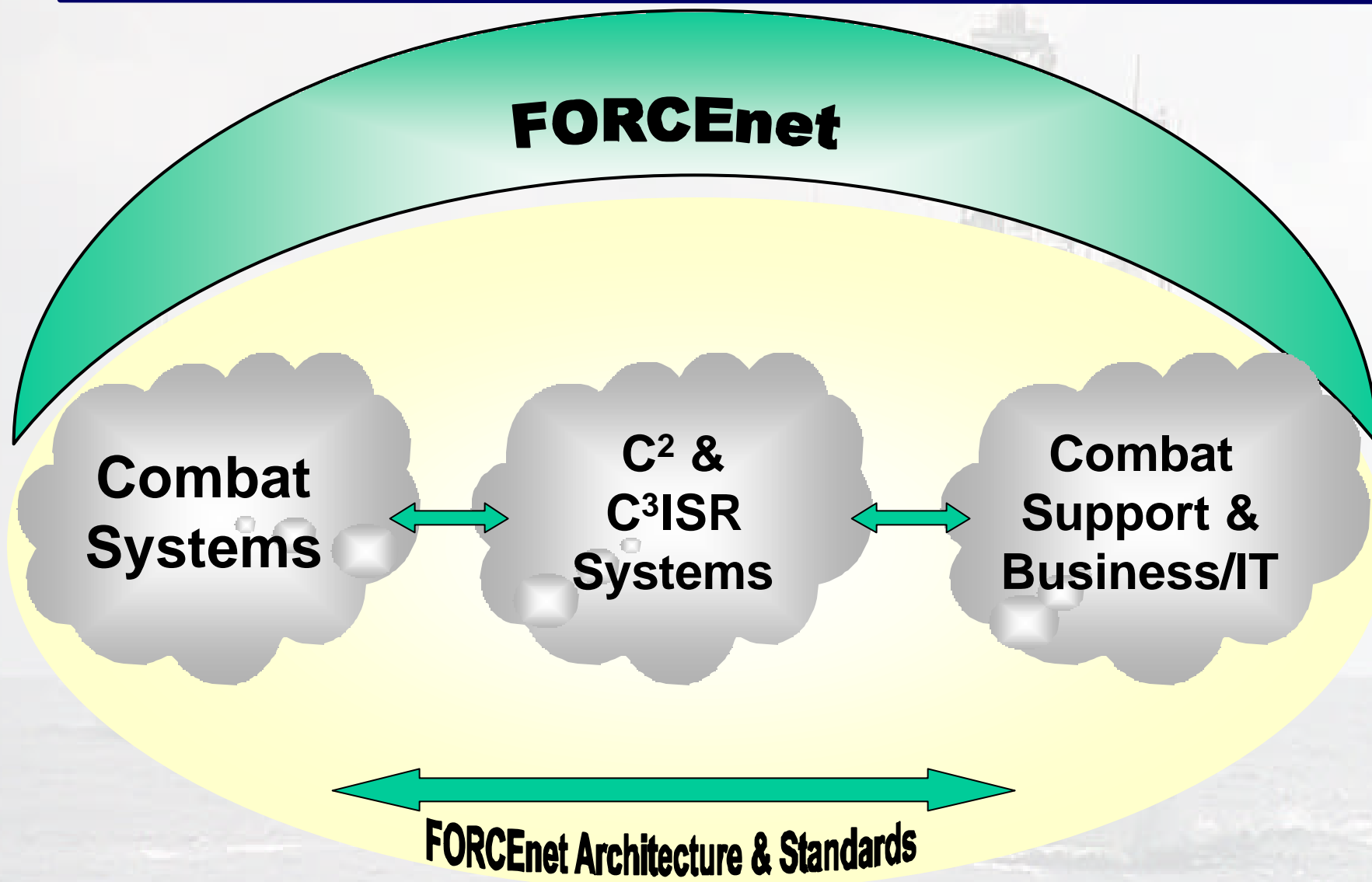


# The SPAWAR Mission



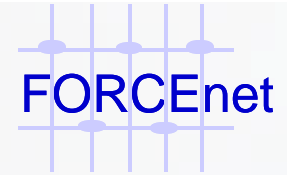
We Deliver  
**FORCEnet**  
to the Joint Warfighter Through the  
**DEVELOPMENT,  
ACQUISITION,  
and  
LIFE CYCLE SUPPORT**  
Of Effective, Capable and  
Integrated Command, Control  
Communication, Computer,  
Intelligence, Surveillance and  
Reconnaissance,  
Information Technology,  
And Space Systems







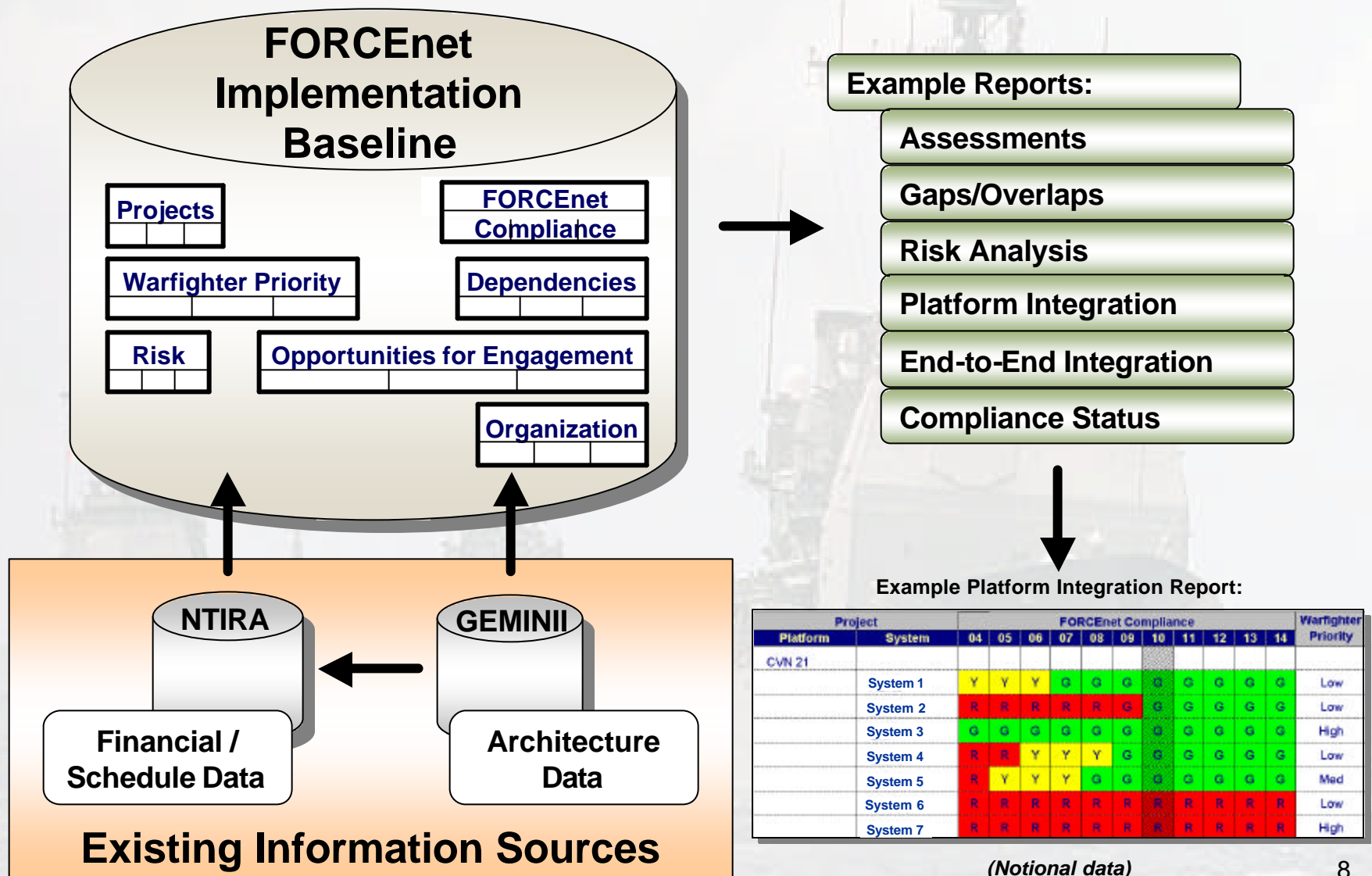
# FORCEnet CHENG Activities



- Pilots/Pathfinder Forcing Functions
- **Implementation Process**
  - **FORCEnet Implementation Baseline (FIBL)**
  - **Architecture & Standards**
  - **Assessments**
    - Support of POM06, PR07 and POM08
  - **Technical Directors & Technical Authority**
  - **Experimentation & Demonstration**



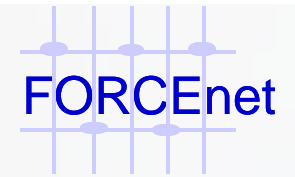
# FORCEnet Implementation Baseline (FIBL)





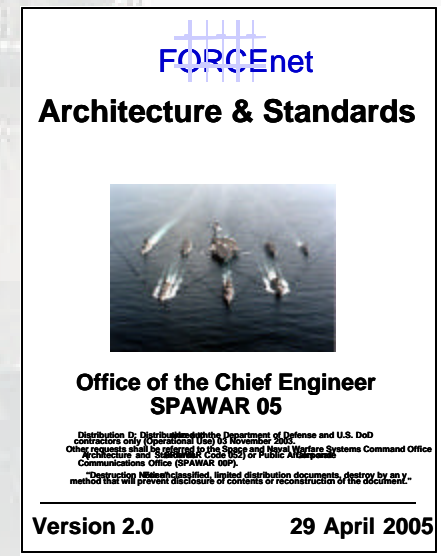
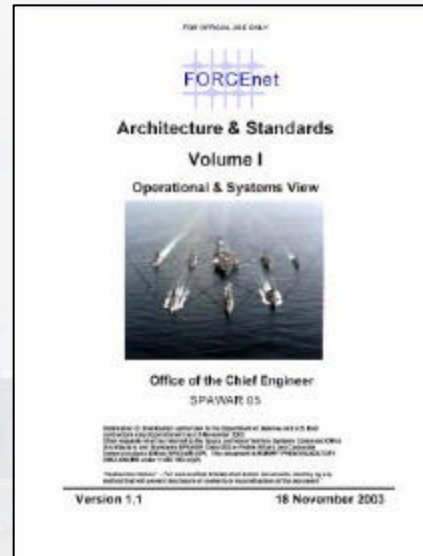
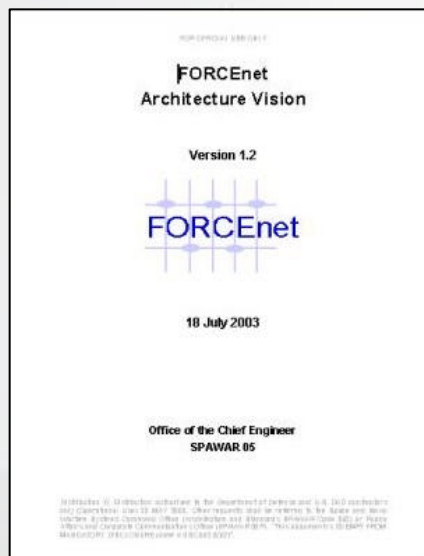


# FORCEnet Consolidated Survey Subject Areas



| Survey Section      | Purpose   | Authoritative Source  |
|---------------------|---|---|
| <b>Programmatic</b> | <b>Identify the System or Program's Position in the Acquisition Lifecycle</b>                               | <b>Department of the Navy IT Registry (OPNAV)<br/>ACAT List</b>   |
| <b>Operational</b>  | <b>Identify the Sea Power 21 Pillar(s) the System or Program Supports and Its Associated MCPs</b>           | <b>OPNAV Sea Power 21 Pillars</b>   |
| <b>Systematic</b>   | <b>Identify the Functions the System or Program Supports</b>  | <b>ASN RD&amp;A CHENG Common System Function List (CSFL)</b>  |
| <b>Technical</b>    | <b>Identify the System or Program's Level of Compliance With Technical Standards That Comprise FORCEnet</b> | <b>OSD NII Checklist<br/>FORCEnet A&amp;S Documents<br/>Open Architecture Computing Environment (OACE)<br/>Joint Technical Architecture<br/>OPNAV FORCEnet<br/>Consolidated Checklist</b> |

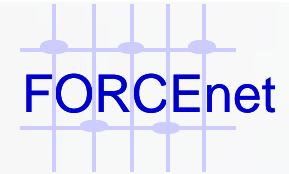
- **What Is the Purpose of the FORCEnet Architecture?**
  - The FORCEnet Architecture Is Being Developed to Identify an Effective and Efficient Migration Strategy That Moves Naval PORs from Their Current Platform/Stovepipe Domain to a Future Joint Network Centric Domain.



**Products available on FORCEnet Docs for Industry Review VPO Site:**  
<https://vpo.spawar.navy.mil/05/FORCENET/DOCSIR/master.nsf>



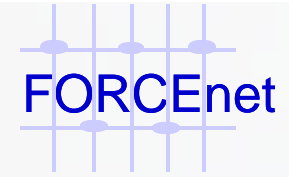
# Industry Participation in FORCEnet A&S



- **Participation by Industry:**
  - **A&S Documents Were Reviewed by Industry:**
    - NDIA, IBM, Lockheed Martin, Raytheon, Others
    - Incorporated Input Into Latest Version 1.4 and Posted on SPAWAR Industry Website
  - **Industry Involved in Multiple FORCEnet Architecture & Standards Conferences**
- **Future Participation Opportunities by Industry:**
  - **Fn A&S Vol. II, Currently Posted at:**  
[https://vpo.spawar.navy.mil/vpopages.nsf/all/start/\\$file/start.html](https://vpo.spawar.navy.mil/vpopages.nsf/all/start/$file/start.html)
    - SPAWAR Will Incorporate Additional Comments/Input Received by Industry Partners
  - **Investigate Hosting an Industry Version of Vol. II on the NDIA Website**



# FORCEnet Technical Guidance For Program Managers



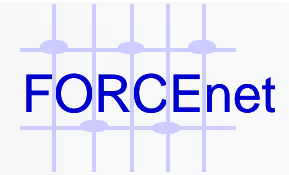
- **Purpose**
  - To Provide Program Managers a Single Source That Summarizes and De-Conflicts All of the Published Technical Guidance
- **Audience**
  - Program Managers and Other Acquisition Professionals
- **Authoritative Sources**
  - GIG-ES/Net-Centric Enterprise Services (NCES)
  - FORCEnet A&S
  - ASD NII Checklist
  - Net-Centric Enterprise Solutions for Interoperability (NESI)
  - Open Architecture Computing Environment (OACE)
  - Others...
- **Consistent with FORCEnet Implementation Baseline (FIBL) Analysis Tools**



- **PR07 Joint Blue Force Situational Awareness (JBFSA) Assessment Report**
- **PR07 ISR Assessment Report**
- **ASUW**
- **DCGS-N**
- **Mission Planning**



# Corporate Leadership Team Challenges



- **We Have...**
  - A Non-Traditional, Huge Scale Challenge
  - Attacked It with a “Traditional” Approach
- **We Should Be Leveraging...**
  - \$6b in Investment Versus \$30m
  - Nearly 12,000 Talented People Versus 150
  - Our Detailed Knowledge of Many Programs of the 400+ in the FIBL

**The “World” Is Waiting...**

[illegible]



# Technical Authority for FORCEnet



## Technical Process Owners:

- FORCEnet Architecture & Standards: Charlie Suggs
- FORCEnet Certification: Scott Cramer
- FORCEnet Baseline: John Isaacson
- NAVAIR Technical Warrant Holder (WH)
- NAVSEA Technical WH
- MARCORSYSCOM Proposed Technical WH

## SPAWAR Technical WHs:

- Collaboration: Dr. Lorraine Duffy (SSC-SD)
- Internal Networks: Stephen Lopic (SSC-SD)
- RF Comms: Dr. Richard North (SSC-SD)
- Data Replication: Mark Zabriskie (SSC-SD)
- LOS/ SATCOM: Scott Henson (SSC-CH)
- Network Management: David Bates (SSC-CH)
- Distributed Services/Web Based Apps: John Andrews (SSC-CH)



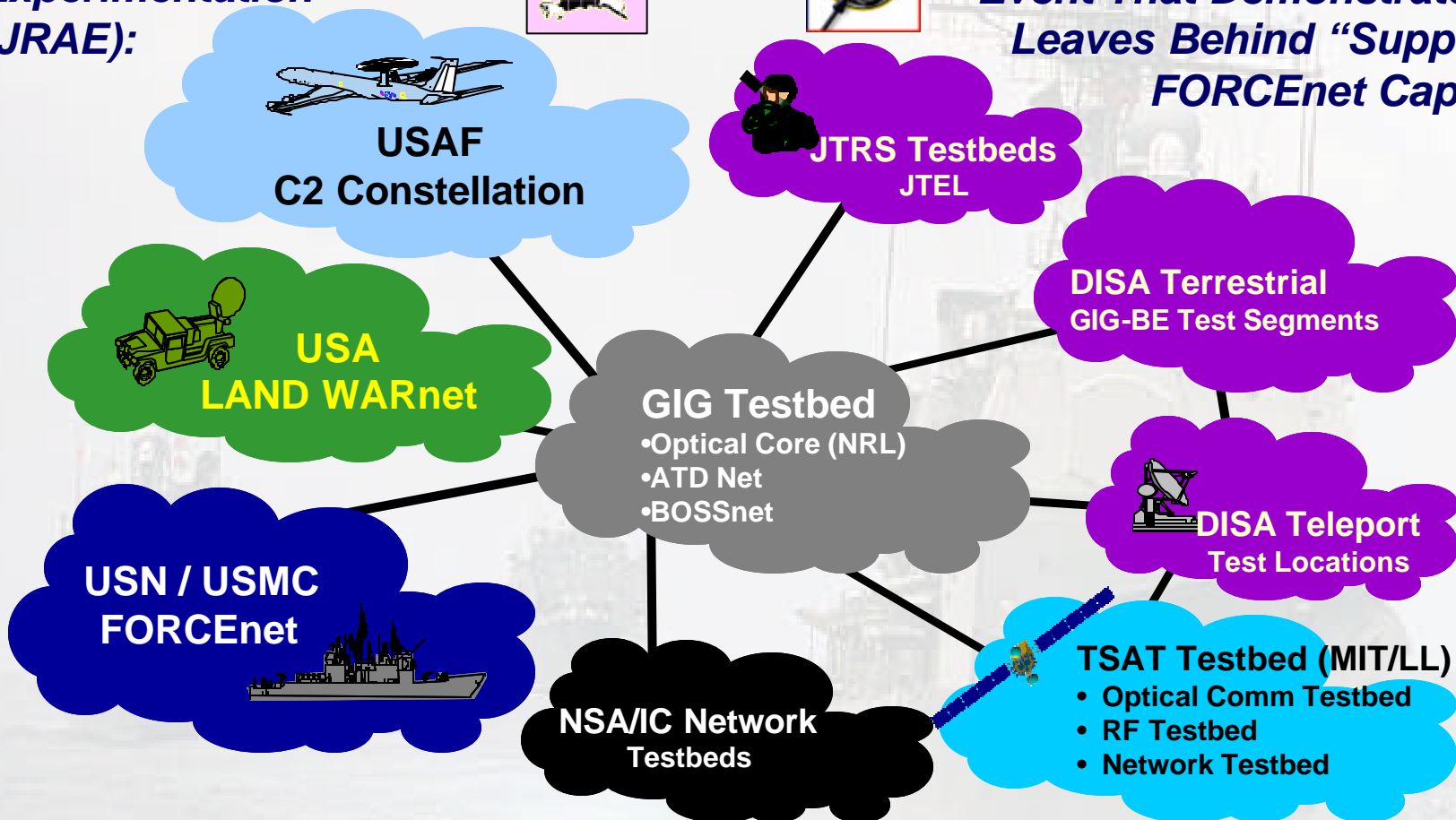


# Experimentation & Demonstration FORCEnet

**Joint Rapid Architecture  
Experimentation  
(JRAE):**



**Trident Warrior: Yearly Sea Trial  
Event That Demonstrates and  
Leaves Behind "Supported"  
FORCEnet Capability**



**Programs Spiral New Capability Through Experimentation**

- **Key Initiatives**
  - Network Improvements
  - ISR
  - Sea Warrior
  - Human Systems Integration
  - Web Enabled Warrior
  - Information Management
  - Fires
- **Major Takeaways**
  - Developed a Solid Analytical Sea Trial Process
  - Got the ESG Off the NOC – Autonomous Ops
  - Moved FORCEnet from the N6 to the N2/3/5
- **Next Steps**
  - Quicklook 29 Oct 04
  - Final Report 7 Jan 05
  - Operational Agent Assessment (OAA) (NNWC) 18-19 Jan
  - Military Utility Assessment (MUA) (FFC) 8-9 Feb



- **Coalition Warrior Interoperability Demonstration**
  - FRP Focus Areas Listed on FBO Webpage
    - <http://www.cwid.js.mil>
- **Trident Warrior**
  - Next Data Call in Spring
- **Consortia for the Grid**
  - POC: CAPT Tom Dlugolecki
- **Some FORCEnet Technology Challenges**
  - Dynamic Interoperable Connectivity
  - Multi-modal HCI
  - Information Assurance in a SOA



# FORCEnet Overall POCs



|   |                       |
|---|-----------------------|
| <b>Office of the Chief Engineer<br/>Executive Secretary</b> | <b>(619) 524-7209</b> |
| <b>Architecture &amp; Standards</b>                         | <b>(619) 524-7237</b> |
| <b>FORCEnet Implementation</b>                              | <b>(619) 524-7962</b> |
| <b>Assessments</b>  | <b>(619) 524-7416</b> |
| <b>Technical Authority</b>                                  | <b>(619) 806-5449</b> |
| <b>Joint Engagement</b>                                     | <b>(619) 524-2010</b> |
| <b>Human System Integration</b>                             | <b>(858) 537-0475</b> |
| <b>Experimentation</b>                                      | <b>(858) 537-0147</b> |
| <b>Consortia</b>  | <b>(619) 508-5033</b> |





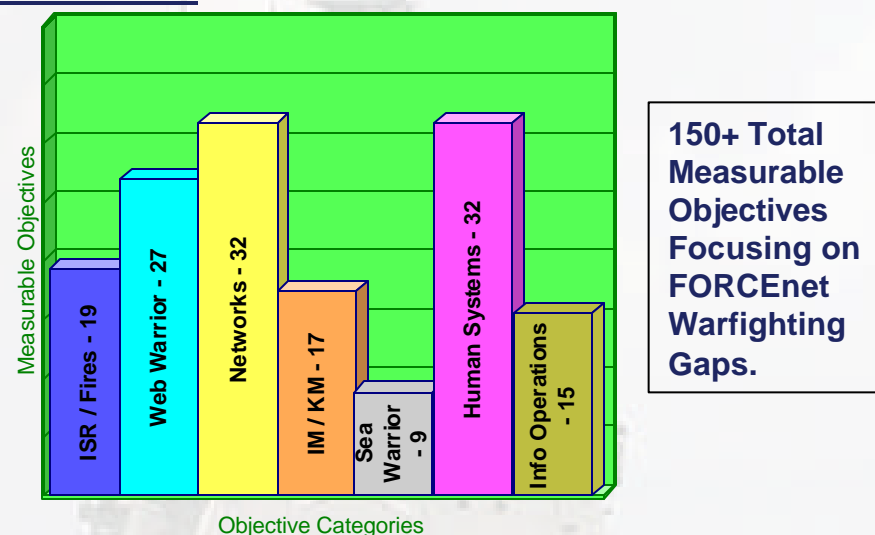
# Trident Warrior 04



## Background:

- **TRIDENT WARRIOR 04**
  - NETWARCOM sponsored
  - Major FORCEnet SEA TRIAL Experiment
- Provide “Speed to Capability”, a rapid fielding of improved warfighting capability to the fleet in areas of FORCEnet Command and Control

## Relevance:



## Status:

**Host:** COMTHIRDFLT  
**Analysis:** Naval PG School  
**Participants:** C3F  
ESG One  
USS Tarawa  
USS Pearl Harbor  
USS Chosin  
USS John Paul Jones  
**Location:** SOCAL/HI Op Areas  
San Clemente

## POA&M:

|                 |                             |
|-----------------|-----------------------------|
| 30 Sep – 15 Oct | TW 04 Execution             |
| 29 Oct          | Quicklook Due               |
| 7 Jan           | Final Report Due            |
| 8 –9 Feb        | Military Utility Assessment |